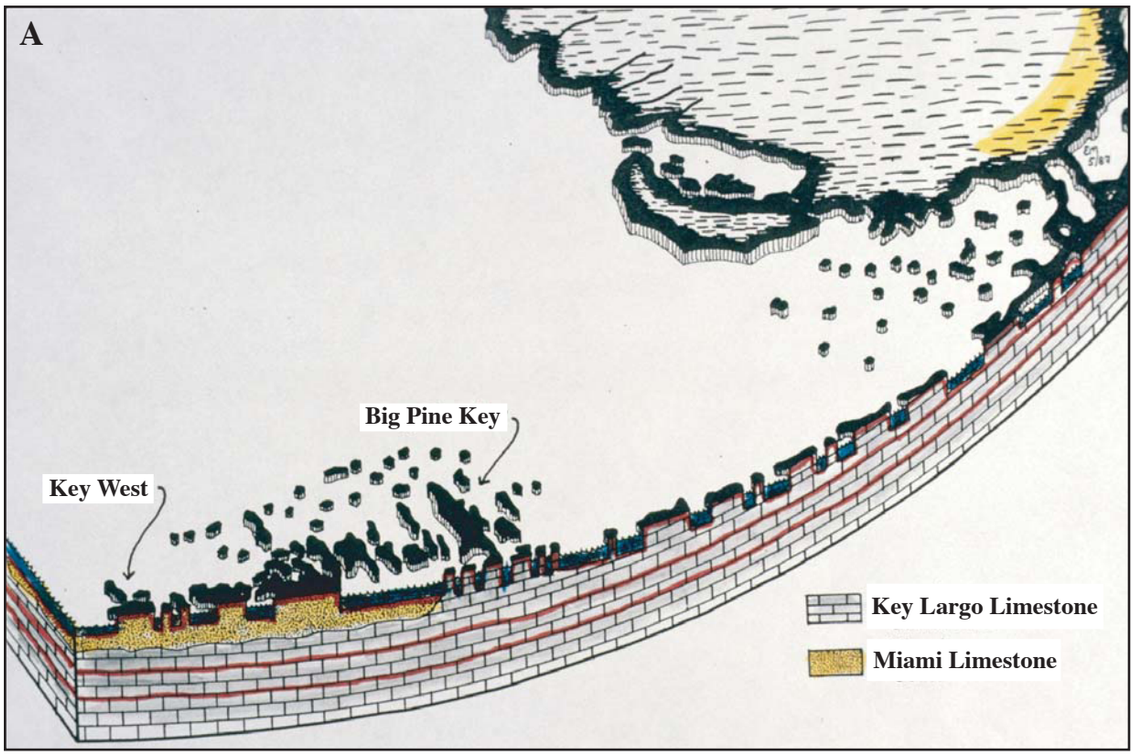
A
Big Pine Key
Key West
Key Largo Limestone
Miami Limestone

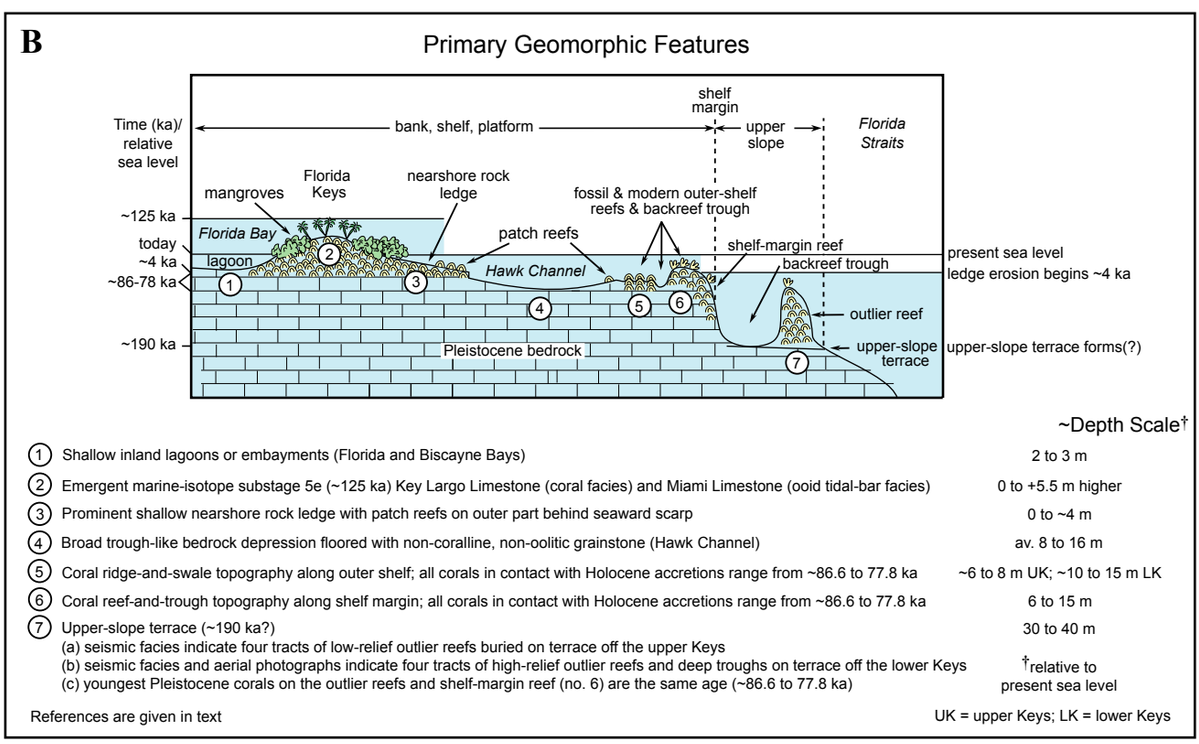
B
Primary Geomorphic Features
Time (ka)/ relative sea level
bank, shelf, platform
shelf margin
upper slope
Florida Straits
mangroves
Florida Keys
nearshore rock ledge
fossil & modern outer-shelf reefs & backreef trough
~125 ka
today
~4 ka
~86-78 ka
~190 ka
Florida Bay
lagoon
patch reefs
Hawk Channel
shelf-margin reef
backreef trough
present sea level
ledge erosion begins ~4 ka
outlier reef
upper-slope terrace
upper-slope terrace forms(?)
Pleistocene bedrock
1
2
3
4
5
6
7
~Depth Scale†
1 Shallow inland lagoons or embayments (Florida and Biscayne Bays) 2 to 3 m
2 Emergent marine-isotope substage 5e (~125 ka) Key Largo Limestone (coral facies) and Miami Limestone (ooid tidal-bar facies) 0 to +5.5 m higher
3 Prominent shallow nearshore rock ledge with patch reefs on outer part behind seaward scarp 0 to ~4 m
4 Broad trough-like bedrock depression floored with non-coralline, non-oolitic grainstone (Hawk Channel) av. 8 to 16 m
5 Coral ridge-and-swale topography along outer shelf; all corals in contact with Holocene accretions range from ~86.6 to 77.8 ka ~6 to 8 m UK; ~10 to 15 m LK
6 Coral reef-and-trough topography along shelf margin; all corals in contact with Holocene accretions range from ~86.6 to 77.8 ka 6 to 15 m
7 Upper-slope terrace (~190 ka?) 30 to 40 m
(a) seismic facies indicate four tracts of low-relief outlier reefs buried on terrace off the upper Keys
(b) seismic facies and aerial photographs indicate four tracts of high-relief outlier reefs and deep troughs on terrace off the lower Keys
(c) youngest Pleistocene corals on the outlier reefs and shelf-margin reef (no. 6) are the same age (~86.6 to 77.8 ka)
†relative to present sea level
References are given in text
UK = upper Keys; LK = lower Keys

Figure 21.